

REMARKS

The rejection of claim 1 under 35 U.S.C. § 103(a) has been obviated by revising this claim to specify that the shield coating that is formed on each surface of the substrate has “no reinforcing fibers.” By contrast, the Matsubara ‘715 patent expressly discloses and teaches a laminated plate member for use in a focal plain shutter blade wherein an intermediate layer 7 flanked by surface layers 3 each are impregnated with either long or short carbon reinforcing fibers (see Figure 2, and Examples 1-5). For this reason alone, amended claim 1 is clearly patentable over the Matsubara ‘715 patent.

Claim 1 is further patentable over the Takuya Japanese ‘218 patent albeit for different reasons. As pointed out in the paragraph bridging pages 4 and 5 of the instant specification, the Takuya ‘218 patent discloses the use of a black PET film that is obtained by adding a high concentration of carbon black to adjust the optical density of the film to a level of 8 or more. As is pointed out on page 5, lines 3-7 of the instant specification, such a black PET film is extremely expensive to fabricate. By contrast, the instant invention recites a combination of a shield coating composed of a paint resin containing a carbon black to provide the desired light shielding properties of the resulting blade material. Even more important, claim 1 recites such a shield coating in combination with a substrate, and a reinforcing member disposed on each shield coating being composed of a thermosetting resin prepreg sheet “reinforced with fibers arranged in an alignment direction . . .”, a teaching completely lacking in the Takuya ‘218 patent. For all these reasons, amended claim 1 is clearly patentable over the ‘218 patent.

The Examiner’s citation of the Takeshi Japanese ‘417 patent is noted; however, as this patent is cited only for its teaching of the use of poly-p-phenylenebenzobisoxazole fibers, no further discussion of this reference is deemed necessary.

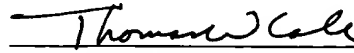
Nor is amended claim 1 rendered “obvious” in view of any tenable combination of the aforementioned references. The Matsubara ‘705 patent seeks to achieve a shutter blade with improved strength and flatness. To this end, it teaches a laminated plate member having an intermediate layer 7 sandwiched between two surface layers 3, all of which are fiber-reinforced. To ensure opacity, the surface layers 3 may each be coated with a black coating

film having a dry lubricant (see column 5, lines 35-37). In the last Office Action, the Examiner suggests that the teachings of the Takuya '218 patent can be used in combination with the aforementioned teachings of the Matsubara '705 patent to obtain the claimed invention. However, such a combination would be directly contrary to the express teachings of the Takuya '218 patent. As is set forth in the English abstract of this reference, the Takuya patent seeks to achieve a lightweight, flat and anti-static light-shieldable film. To this end, a thermal plastic resin film is sandwiched between two other films formed from a thermosetting resin containing carbon black, lubricants and matting agents. The required opacity of the resulting film is achieved by adding between 40 to 70 weight percent of carbon black per 100 weight percent total of the resin component. By contrast, in the Matsubara '715 patent, the inventor observes that "resin contents as small as 30 to 45 wt percent, . . . in the intermediate layer leads to the creation of defects, such as micro-cracks and cavities, as well as to inferior flatness. . . ." Hence, the Matsubara '715 patent teaches against this substitution of the high-carbon particle content thermoplastic resin layers of the Takuya '218 patent with the carbon fiber reinforced layers of the Matsubara '715 patent. For all these reasons, no combination of these two references can provide a tenable basis for a rejection of amended claim 1 under 35 U.S.C. § 103, particularly in view of the latest amendment wherein the shield coating is also specified as "having no reinforcing fibers." As the Takashi '417 patent is cited only for its use of a particular nonwoven fabric in a prepreg, it also fails to fill the gaps present in either of the two aforementioned references to arrive at the claimed invention. Accordingly, applicant's attorney requests the Examiner reconsider and withdraw the rejection of claim 1 under 35 U.S.C. § 103.

As the balance of the claims are ultimately dependent upon claim 1, these claims are all patentable at least by reason of such dependency.

Now that all the claims are believed to be allowable, the prompt issuance of the Notice of Allowance is hereby earnestly solicited.

Respectfully submitted,



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